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Date: 12 July 2019

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AS 3959 Bushfire Attack Level (BAL) Assessment Report Lots 401, 410 & 411 Napoli Drive, Hammond Park

Site Details			
Address:	Lots 401, 410 & 411 Napoli Drive		
Suburb:	Hammond Park	State:	Western Australia
Local Government Area:	City of Cockburn		
Description of building works:	Construction of a single residential dwelling and associated Class 10a building within each of the three identified lots		

Report details			
Report/Job number:	RNO18292.01	Report reference:	RNO18292_01 M002 Rev B
Assessment date:	2/08/18 & 15/05/19	Report date:	12 July 2019
Endorsement/Review	Zac Cockerill BPAD Level 2: 37803		

Site assessment and site plan

The assessment of this site/development was undertaken on 2 August 2018 and reassessed on 15 May 2019 by a BPAD Accredited Practitioner for the purpose of determining the Bushfire Attack Level in accordance with AS 3959 - 2009 (Simplified Procedure [Method 1]).

A site plan and site BAL assessment results are depicted in Figure 1.

Vegetation classification

All vegetation within 150 m of the site/development was classified in accordance with Clause 2.2.3.2 of AS 3959-2009 and the *Visual Guide for Bushfire Risk Assessment in Western Australia*. Each distinguishable vegetation class with the potential to determine the Bushfire Attack Level is identified below in Table 1 and Figure 1.

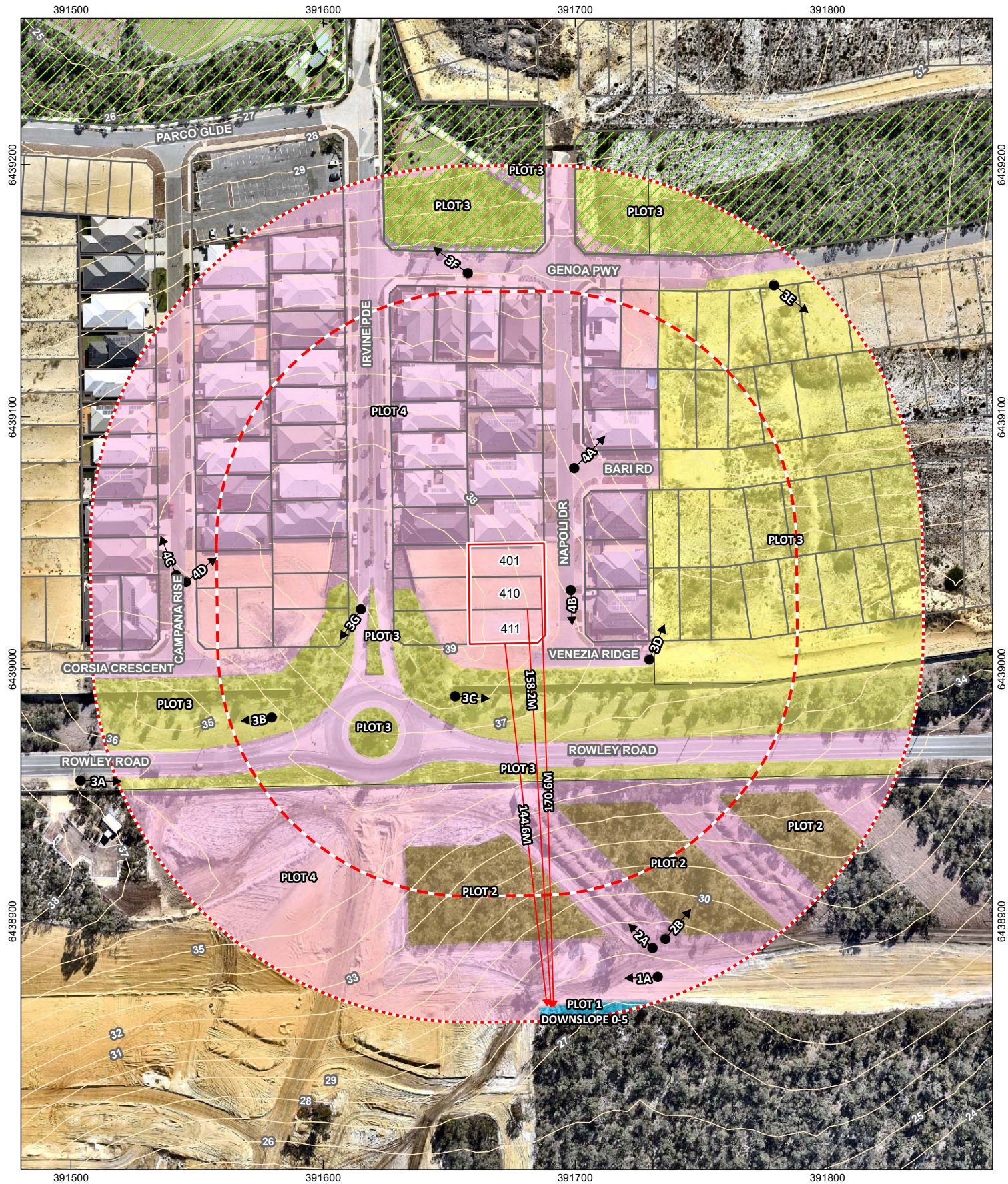


Figure 1: BAL assessment

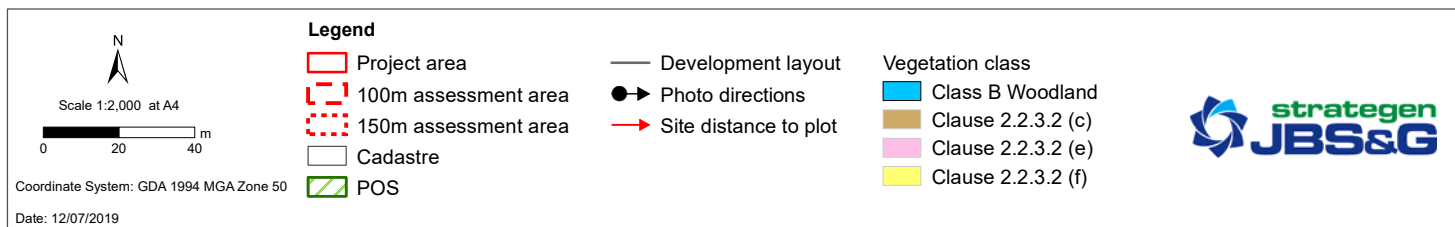
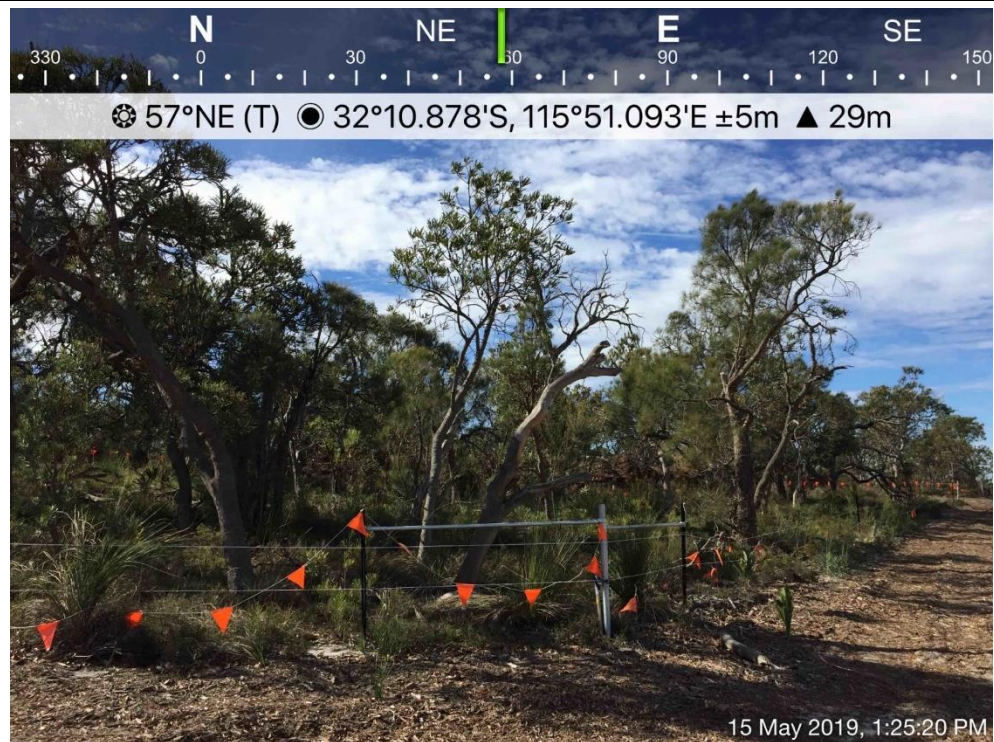
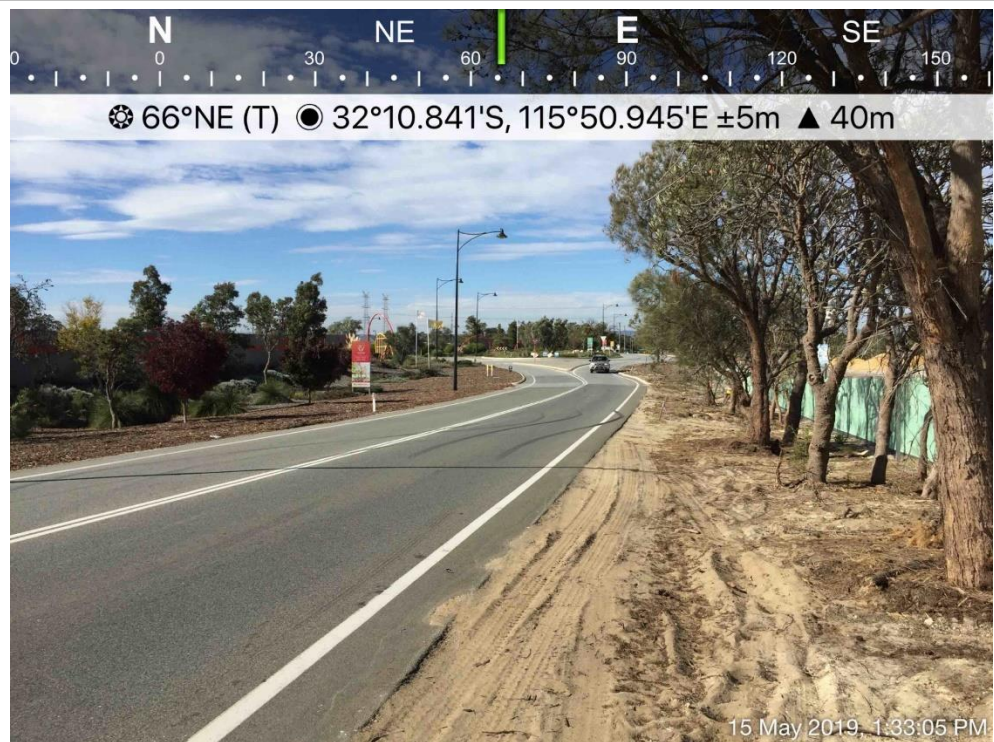


Table 1: Vegetation classification

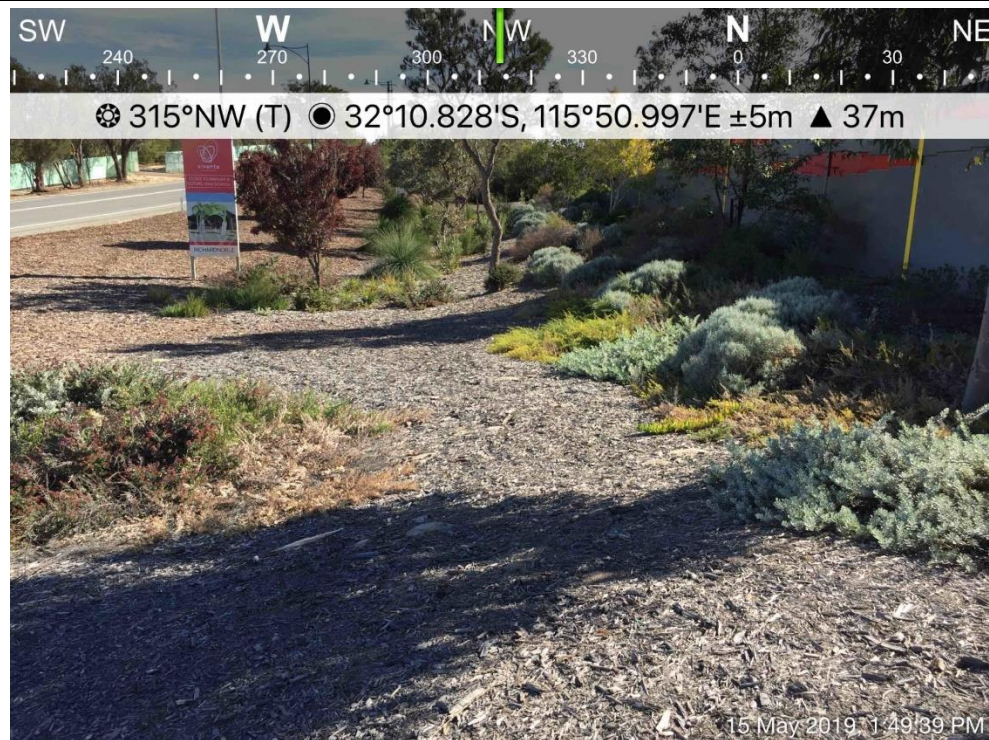
 <p>15 May 2019, 1:25:46 PM</p>	<p>SW W NW N</p> <p>210 240 270 300 330 0</p> <p>275°W (T) 32°10.885'S, 115°51.094'E ±5m ▲ 27m</p>
<p>Plot 1:</p>	<p>Class B Woodland</p>
<p>Photo 1a:</p>	<p>Retained banksia woodland to the south within Apsley site (far left of shot)</p>
 <p>15 May 2019, 1:25:09 PM</p>	<p>SW W NW N NE</p> <p>240 270 300 330 0 30</p> <p>314°NW (T) 32°10.879'S, 115°51.091'E ±5m ▲ 29m</p>
<p>Plot 2:</p>	<p>Excluded – Clause 2.2.3.2 [c]</p>
<p>Photo 2a:</p>	<p>Retained banksia woodland cells to the south within Apsley site (multiple plots less than 0.25 ha in size and not within 20 m of the site, each other or other areas of vegetation being classified)</p>



Plot 2:	Excluded – Clause 2.2.3.2 [c]
Photo 2b:	Retained banksia woodland cells to the south within Apsley site (multiple plots less than 0.25 ha in size and not within 20 m of the site, each other or other areas of vegetation being classified



Plot 3:	Excluded – Low threat (Clause 2.2.3.2 [f])
Photo 3a:	Low threat managed road verges along Rowley Road to the south



Plot 3:	Excluded – Low threat (Clause 2.2.3.2 [f])
Photo 3b:	Low threat managed road verges along Rowley Road to the south



Plot 3:	Excluded – Low threat (Clause 2.2.3.2 [f])
Photo 3c:	Low threat managed road verges along Rowley Road to the south



Plot 3:	Excluded – Low threat (Clause 2.2.3.2 [f])
Photo 3d:	Low threat managed land within adjacent east stages of Vivente Estate subject to future development



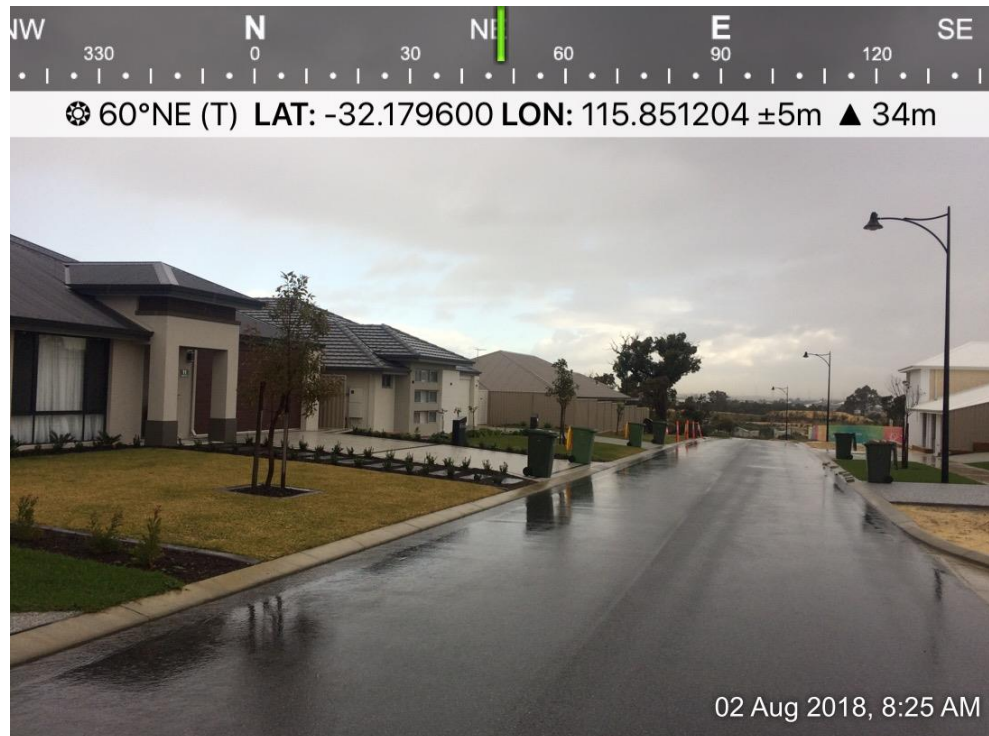
Plot 3:	Excluded – Low threat (Clause 2.2.3.2 [f])
Photo 3e:	Low threat managed land within adjacent east stages of Vivente Estate subject to future development



Plot 3:	Excluded – Low threat (Clause 2.2.3.2 [f])
Photo 3f:	Vegetation within POS to the north maintained in a low fuel state in accordance with the endorsed Bushfire Management Plan (Strategen 2015)



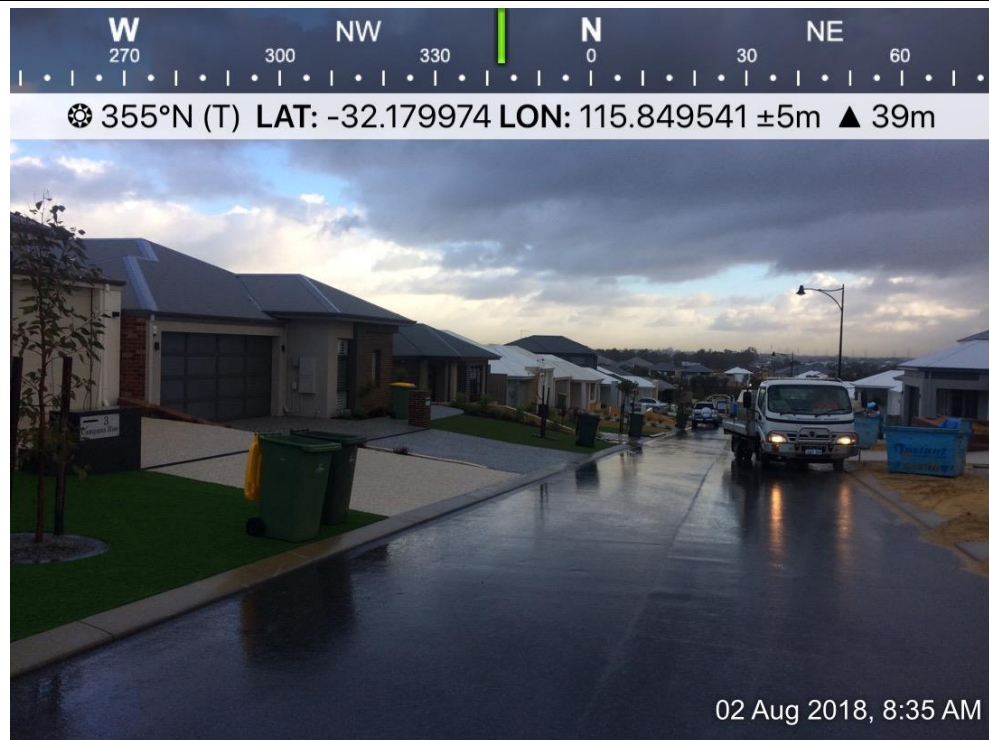
Plot 3:	Excluded – Low threat (Clause 2.2.3.2 [f])
Photo 3g:	Low threat managed entry road planting to the west



Plot 4:	Excluded – Non-vegetated (Clause 2.2.3.2 [e])
Photo 4a:	Non-vegetated areas occupied by roads and built form



Plot 4:	Excluded – Non-vegetated (Clause 2.2.3.2 [e])
Photo 4b:	Non-vegetated areas occupied by roads and built form



Plot 4:	Excluded – Non-vegetated (Clause 2.2.3.2 [e])
Photo 4c:	Non-vegetated areas occupied by roads and built form



Plot 4:	Excluded – Non-vegetated (Clause 2.2.3.2 [e])
Photo 4d:	Non-vegetated areas occupied by roads and built form

Relevant Fire Danger Index

The fire danger index for this site/development has been determined in accordance with Table 2.1 of AS 3959–2009 or otherwise determined in accordance with a jurisdictional variation applicable to the site.

Fire Danger Index			
FDI 40 <input type="checkbox"/> Table 2.4.5	FDI 50 <input type="checkbox"/> Table 2.4.4	FDI 80 <input checked="" type="checkbox"/> Table 2.4.3	FDI 100 <input type="checkbox"/> Table 2.4.2

Potential bushfire impacts

The potential bushfire impact to the site/development from each of the identified vegetation plots are identified in Table 2 to Table 4.

Table 2: BAL analysis (Lot 401)

Plot	Vegetation classification	Calculation method	Effective slope	Separation (m)	BAL
1	Class B Woodland	Method 1	Downslope ($>0^{\circ}$ – 5°)	170.6 m	BAL–Low
2	Excluded – Clause 2.2.3.2 [c]	Method 1	N/A	N/A	BAL–Low
3	Excluded – Low threat (Clause 2.2.3.2 [f])	Method 1	N/A	N/A	BAL–Low
4	Excluded – Non-vegetated (Clause 2.2.3.2 [e])	Method 1	N/A	N/A	BAL–Low

Table 3: BAL analysis (Lot 410)

Plot	Vegetation classification	Calculation method	Effective slope	Separation (m)	BAL
1	Class B Woodland	Method 1	Downslope ($>0^{\circ}$ – 5°)	158.2 m	BAL–Low
2	Excluded – Clause 2.2.3.2 [c]	Method 1	N/A	N/A	BAL–Low
3	Excluded – Low threat (Clause 2.2.3.2 [f])	Method 1	N/A	N/A	BAL–Low
4	Excluded – Non-vegetated (Clause 2.2.3.2 [e])	Method 1	N/A	N/A	BAL–Low

Table 4: BAL analysis (Lot 411)

Plot	Vegetation classification	Calculation method	Effective slope	Separation (m)	BAL
1	Class B Woodland	Method 1	Downslope ($>0^{\circ}$ – 5°)	144.6 m	BAL–Low
2	Excluded – Clause 2.2.3.2 [c]	Method 1	N/A	N/A	BAL–Low
3	Excluded – Low threat (Clause 2.2.3.2 [f])	Method 1	N/A	N/A	BAL–Low
4	Excluded – Non-vegetated (Clause 2.2.3.2 [e])	Method 1	N/A	N/A	BAL–Low

Determined Bushfire Attack Level

The Determined Bushfire Attack Level (highest BAL) for the site / proposed development has been determined in accordance with Clause 2.2.6 (Simplified Procedure [Method 1]) of AS 3959-2009 using the above analysis.

Determined Bushfire Attack Level	
Lot 401	BAL–Low
Lot 410	BAL–Low
Lot 411	BAL–Low